

Date: Thu, 28 Jan 93 12:59:47 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #126
To: Info-Hams

Info-Hams Digest Thu, 28 Jan 93 Volume 93 : Issue 126

Today's Topics:

 "Endurance"
 Anyone test after Nov 14th get their license yet?
 Burglars are brighter than you might think!
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 LW antenna
 MFJ 1278 & SOFT FOR SALE
 MFJ HF Vertical Question.
 Transmitting 50-178 & 300-512?
 Using electrical outlet ground as earth ground?????
 Wilson T-1402SM

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Wed, 27 Jan 1993 22:36:00 GMT
From: Cadence.COM!jdm@uunet.uu.net
Subject: "Endurance"
To: info-hams@ucsd.edu

>
>> Greetings to readers of QST!
>

>> My short-story, "Endurance," will appear in the February issue of QST.
>
>
>Let me guess what "endurance" refers too...
>
>Is it regarding how long a new ham can wait for his FCC license before he
>breaks down, grabs his HT, sets the power on HIGH and screams...
>
>
> "I've been waiting three months for my license and
>
> I CAN'T TAKE IT ANY MORE!!!"
>
>
>The ability to resist that temptation: is THAT what endurance is all about? ;-)
>

Um. No.

But I understand the temptation. You experience the same thing when
your parents tell you to "wait until...X" to have sex.

Frankly, I did much better at restraining myself from illegally emitting
RF than I did from participating in adolescent mating. With radio, I
was certain the FCC would pinpoint my location within seconds of
an illegal radio outburst. With the other, well, we didn't have AIDS
in the late 70's and I didn't think I'd meet a woman who could neutralize
my higher cortical function.

Turns out, I was wrong on both counts.

Joe

--

Joe Mastroianni	AKA: AA6YD AA6YD @ N6LDL.#NOCAL.CA.USA.NA
Cadence Design Systems	Compuserve: 74017,310 Genie: JOE-M
Santa Clara Ca.	"Up the airy mountain;down the rushy glen; we
jdm@cadence.com	daren't go a hunting; for fear of little men "

Date: Tue, 26 Jan 1993 13:14:08 GMT

From: shearson.com!jenny!mjohnsto@uunet.uu.net
Subject: Anyone test after Nov 14th get their license yet?
To: info-hams@ucsd.edu

The suspense is killing me. Has anyone who tested after November 14th received their ticket from the FCC?

MJ

--

Michael R. Johnston, System Administrator mjohnsto@shearson.com
"The reasonable man adapts himself to the world; the unreasonable one persists in trying to adapt the world to himself. Therefore, all progress depends on the unreasonable man." - G.B. Shaw

Date: 28 Jan 1993 00:59:05 GMT
From: usc!cs.utexas.edu!bcm!lib!oac.hsc.uth.tmc.edu!jmaynard@network.UCSD.EDU
Subject: Burglars are brighter than you might think!
To: info-hams@ucsd.edu

In article <1k6o7jINN29p@rave.larc.nasa.gov> kludge@grissom.larc.nasa.gov (Scott Dorsey) writes:

>Nahh, I've got the solution. Try a Collins R-390A, teamed up with a Johnson
>Viking in a nice military steel rack cabinet. I'd just like to see them try
>to steal it. It took six people to lift it up the front steps.

Kinda like my TV set: a Heath GR-2001 in a Magnavox console cabinet. Any thief that can physically get it out the door is someone I'm not going to tangle with... There are times I wish my computers were the same way. (Actually, one of them is, too: my Unix box is about 150 pounds.)

--

Jay Maynard, EMT-P, K5ZC, PP-ASEL | Never ascribe to malice that which can
jmaynard@oac.hsc.uth.tmc.edu | adequately be explained by stupidity.
"begin 666 foo 266]U(&AA=F4@;F\@;&EF92X* ` end" -- Daniel Drucker

Date: Wed, 27 Jan 1993 16:30:53 GMT
From: elroy.jpl.nasa.gov!swrinde!gatech!paladin.american.edu!
howland.reston.ans.net!usc!sdd.hp.com!hpscit.sc.hp.com!hplextra!hpcss01!hpwala!
joes@ames.arpa
Subject: Call book on-line??
To: info-hams@ucsd.edu

Hi,

Does anyone know how to get access to the on-line call book? I'm told there is

one

Thanks.

[illegible]

Joe Smulowicz
Hewlett Packard
Patient Care Monitoring Systems
175 Wyman Street
Waltham, Massachusetts 02254

(joes@hpwarbz.wal.hp.com)

TEL 617-290-3760

FAX 617-290-3790

[illegible]

Date: Thu, 28 Jan 1993 05:31:20 GMT

From: usc!cs.utexas.edu!swrinde!emory!wa4mei!ke4zv!gary@network.UCSD.EDU

Subject: Computer power supplies and radios.

To: info-hams@ucsd.edu

In article <26JAN93.23285391@nauvax.ucc.nau.edu> cym@nauvax.ucc.nau.edu writes:

>I have seen several posts saying that it is easy to use a computer power supply
>to power a radio. I remember an old post talking about using the computer
>supply to charge a deep cycle battery and power the radio, but I can't find it.
>Right now I am running my radio off a deep cycle battery and charging it with
>an automotive charger as needed. I would like to use the power supply to
>charge the battery/power the radio. How can I do this?

 \succ

```
>I have a 150 watt power supply, a group 27 deep cycle battery and a mobile two
>meter radio (Alinco DR-110T). I know the radio does not draw more than 15 amps
>(the fuses are 15 amps) on high power, but don't know exactly how much it does
>draw. The power supply does not have any amperage ratings on it, but I am
>afraid it would not supply enough current for high power transmitting. The
>power supply provides 5, 7 and 12 volts (approx) on the various connectors. 12
>volts would probably be enough to run the radio but not charge the battery.
>Do I have to modify the power supply to get a high enough voltage to charge the
>battery? Also I need some overcharging protection. Any help would be greatly
>appreciated.
```

Well first the bulk of that 150 watts in the PC supply is at 5 volts. The 12 volt supply capability is probably no more than 2 amps, or 24 watts. That won't power your Alinco. As to how much current the Alinco draws, *measure it*. That's why meters were invented. It's also printed in the owner's manual. The 12 volt output of the PC supply is 12.0 volts. A fully charged deep cycle lead-acid "12 volt" battery actually has a terminal voltage of 13.8 volts, so your PC supply will never fully

recharge the battery and no overcurrent limiting is required. In fact, to properly charge a "12 volt" battery, a charging voltage of 14.5 volts is required. The Alinco is designed with those voltages in mind and will begin to get squirrely as voltage drops to near 10 volts as the battery discharges.

There is a further fly in the ointment. The PC supply is a switcher and won't work properly unless it is loaded to a minimum current draw. Basically this means you need to put some big power resistors across the 5 volt line, and perhaps a smaller power rating resistor across the 12 volt line as well, to insure proper operation of the switch mode regulators. The switcher is a RL circuit with the load supplying the R. Unless a certain amount of R is present, voltage transients can reach very high levels and do serious damage to solid state components. All switchers are finicky about their load, and typical clone PC supplies are particularly cheaply designed with little or no protection. It's a bad idea.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

Date: Thu, 28 Jan 1993 03:05:48 GMT
From: yuma!ulysses!steven@purdue.edu
Subject: CQ EU de AH1A
To: info-hams@ucsd.edu

The AH1A, Howland Island operation began on January 25, and will continue until February 2.

One of the prime objectives of the AH1A operation is to satisfy the demand for KH1 in Europe (#2 on the EU wanted list).

If you are in Europe, the AH1A operators need your help !

Are there bands and times that you are hearing AH1A that they are working JA or USA, instead of EU ? There are really trying to work EU whenever there is propagation.

So far, the best EU propagation they have found is 7 MHz from 0630Z until 0730Z. That's not much of a window !

Please pass on your reception reports of AH1A in Europe, and I will see

that they are promptly forwarded to the AH1A crew.

If you have worked them, congratulations - QSL via:

MHDXA
P.O. Box 1
Franktown, CO USA 80116

Thanks,
Steve, N2IC/0
n2ic@drutx.att.com

Date: Thu, 28 Jan 1993 06:00:35 GMT
From: usc!sdd.hp.com!swrinde!gatech!kd4nc!ke4zv!gary@network.UCSD.EDU
Subject: FM broadcast station sidebands
To: info-hams@ucsd.edu

In article <1993Jan26.122411.10075@hemlock.cray.com> dadams@cray.com writes:

>Ok this may not be the best newsgroup for this, but then hams
>would know the answer to this better than any other group I can
>think of.

>

> years ago I learned that broadcast stations in the FM commercial
>broadcast band (88-108 MHz) often do not need to use all of the
>spectrum allotted to them for broadcasting what they broadcast, and
>hence they some times broadcast other things on sidebands like
>elevator music etc. You can't pick this up on normal receivers. They
>sell special receivers to businesses and other organizations so that
>they can play this elevator music or background music. I think that
>it is usually mono (not stereo). When I lived in the Chicago area
>many years ago, we had this light and easy station (I don't remember
>the name) that I believe is owned by Boneville International. They
>would broadcast proceedings of church conferences for the Mormon Church
>on one of these sidebands. My family bought this radio that would
>receive these broadcasts. This radio was fixed to receive this one
>side band only. You couldn't tune it to receive any other sidebands or
>stations. (On occasion you could hear the main station bleeding over
>I think.)

>

>So my question is, what would one have to do to modify a receiver, or build
>a receiver to tune in such broadcasts? Would it be hard? Why don't
>commercial manufacturers supply such a function, at least for the more
>expensive receivers?

The word you are looking for is "subcarrier", and the equipment you
want is called a SCA or SubCarrier Adapter. All stereo FM stations,

and BTSC stereo TV stations transmit subcarriers. For FM stations, there is a suppressed carrier at 19 kHz carrying the L-R information of the broadcast while the main channel transmits L+R, and a 38 kHz pilot tone to phase lock the quadrature demodulator for the stereo reconstruction. These subcarriers are applied as baseband modulation to the RF carrier.

Above the stereo subcarriers, other program material may be encoded on other subcarriers. One common frequency is 62 kHz. This subcarrier may be NBFM modulated with secondary programing such as "elevator music" or foreign language translation or reading service for the blind or stock ticker information or _Sky Page_ pager information and so on. These programs have common carrier status and are not intended for reception by the general public. That's why no commercial broadcast receiver has a built in SCA. "Elevator music", or Muzak, is a commercial service that *charges* for it's programing, as do the _Sky Page_ and stock ticker services. Reading for the Blind is a free service, but only makes SCA equipment available to blind people.

However, SCA equipment is often sold in the back pages of hobbieist magazines such as _Popular Electronics_. Basically how they work is they are connected directly to the demodulator of the broadcast radio before the low pass filtering that removes any signals above the audible range. They use a PLL circuit to lock onto and demodulate the 57, 62, 67, or 72 kHz subcarrier signal.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

Date: Thu, 28 Jan 1993 01:18:47 GMT
From: adobe!swirsky@decwrl.dec.com
Subject: Ham Radio Causes Cancer!
To: info-hams@ucsd.edu

In article <1993Jan26.152134.5792@newsgate.sps.mot.com> rapw20@email.sps.mot.com writes:

>Speaking of ham radio and cancer, I'm sure many of you have seen the news
>coverage of the lawsuit accusing cellular phones of causing cancer. I saw
>a report of it last night on NBC.

I always thought that hams (and sw listeners &c.) could use this public concern over RF energy as a tool to overturn laws that restrict the

reception of the Cellular Phone frequencies on certain scanners.

You just have to convince the public, and your elected officials, that it is important to have the ability to monitor this radiation that some believe to cause health risks.

An argument that would work in these environmentally sensitive times is that the cellular companies lobbied for the ban on receivers so that the public wouldn't be able to measure the amount of RF energy around them.

Attacking the Electronic Communications Privacy Act (or whatever it's called) on the basis that a citizen has a right to monitor something that is a possible health risk might prove more successful than attacking it with other arguments.

--

"Duff Beer for Me,
Duff Beer for You,
I'll have a Duff Beer,
You'll have one, too!" -- Duff Gardens Theme Song

Date: 28 Jan 93 04:12:52 GMT
From: usc!howland.reston.ans.net!bogus.sura.net!udel!gatech!prism!
gt4503e@network.UCSD.EDU
Subject: IONCAP Propagation Software Upload Wanted.
To: info-hams@ucsd.edu

software program for MS-DOS. The zipped software was about 600K and was uploaded on to wuarchive.wustl.edu (I think)).

Could someone re-upload the software. A recent check of the files on that host showed its absense.

Is source available yet at no charge? Thanks

Tracy

--

Tracy K. Wood, Student, Georgia Institute of Technology, PO Box 24503, Atlanta,
GA 30332 USA Amateur Radio: KD0UP/4 (706) 791-3561
uucp:!{decvax,hplabs,ncar,purdue,rutgers}!gatech!prism!gt4503e
Internet: gt4503e@prism.gatech.edu (or) sigcen@chmsr.gatech.edu

Date: Thu, 28 Jan 1993 06:35:12 GMT

From: usc!howland.reston.ans.net!bogus.sura.net!udel!gatech!kd4nc!ke4zv!
gary@network.UCSD.EDU
Subject: LW antenna
To: info-hams@ucsd.edu

In article <1993Jan27.154244.12228@hemlock.cray.com> dadams@cray.com writes:
>

>Suppose one would like to try to pick up some DX stations on the AM broadcast
>band. Usually the antenna is inside the radio. What could one do to
>set up a more sensitive antenna? Is there anything one can do without
>spending much \$\$? What if space is limited to a small back yard. (I can
>go maybe 200' max.)

You can stretch out a long wire, wrap a few turns of it around the ferrite loopstick antenna in the radio, and ground the short end to a convenient cold water pipe. But don't be surprised if the results aren't too satisfactory. Like using outside gain antennas on HTs, the extra signal strength may overload the radio and generate spurious products across the band. A very selective antenna tuner will be a great help. But as *everyone* in the shortwave group will tell you, to do good but inexpensive MW listening, get the GE Super Radio and use it as is. Service Merchandise, and other chain stores carry, or can order, one for you for under \$50, and it is well worth it. This is a basic analog dial mono radio with an exceptional tuned front end and good IF selectivity. It sounds great, and will pull in the DX without resorting to outside antennas.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

Date: Thu, 28 Jan 1993 07:08:55 GMT
From: ncar!destroyer!fmsrl7!lynx.unm.edu!nmsu.edu!dante!mormsby@ames.arpa
Subject: MFJ 1278 & SOFT FOR SALE
To: info-hams@ucsd.edu

MFJ 1278 and software for sale. This unit does it all! Will include the newest tcip and mfj's 1284 software.

email: mormsby@dante.nmsu.edu

Date: 28 Jan 93 02:49:29 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!spool.mu.edu!hri.com!noc.near.net!
genrad.com!genrad.com!not-for-mail@network.UCSD.EDU
Subject: MFJ HF Vertical Question.
To: info-hams@ucsd.edu

The MFJ antenna is a ripoff of the C4 co-axial half wave vertical design.
I guess the Hy-gain patent expired on the loading coil design as MFJ is
using it.

I bought a C4 and after using it for a week tossed it into the corner of
my garage where it still protests its abandonment by stabbing me in the
proverbial when i stray near its spikes.

Hy-gain quoted its performance as 2db gain over a GP - i.e. 1 db worse
than a dipole.

My advice is go buy a used R5 and save some bucks and you'll have a nice
antenna.

BTW it was a pig to tune those spokes on the C4 and I'm sure the MFJ
will be equally frustrating. To tune it you have to file *one* spoke on
each coil by a few mm to raise the freq so if you go too far - tough.
Plus the spokes are brass and break easy.

I called a few dealers about the MFJ 249 SWR Analyser/freq counter and
they said late March at the earliest.

73 Trevor G3WQ0 AB5EU still exiled in Texas.

Date: Thu, 28 Jan 1993 05:05:01 GMT
From: usc!cs.utexas.edu!swrinda!emory!wa4mei!ke4zv!gary@network.UCSD.EDU
Subject: Transmitting 50-178 & 300-512?
To: info-hams@ucsd.edu

In article <1993Jan26.181740.2349@sj.ate.slb.com> jones@sj.ate.slb.com (Clark
Jones) writes:

>Willie Smith (wpns@miki.pictel.com) wrote:

>: Can you even build a PLL that works over more than an octave without
>: resorting to esoteric tricks that are unlikely to be found in
>: commercially available radios?

>

>BTW, there are several commercially available receivers that use PLLs for
>the LO and cover from ~0.1MHz to ~30MHz. That's >8 octaves...

Yes, but those are itty bitty octaves down so close to DC, smaller than a single band at UHF. :-)

In fact, I think that's how many of them work, they generate a suboctave span oscillator at UHF and downconvert it to near DC where it spans many of the itty bitty octaves. At least that's how IFR does it in their spectrum analysers.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

Date: Thu, 28 Jan 1993 06:10:00 GMT

From: usc!howland.reston.ans.net!bogus.sura.net!udel!gatech!kd4nc!ke4zv!

gary@network.UCSD.EDU

Subject: Using electrical outlet ground as earth ground?????

To: info-hams@ucsd.edu

In article <1993Jan27.113234.5504@klaava.Helsinki.FI> stickler@klaava.Helsinki.FI (Patric M Stickler) writes:

>Does the ground socket of an electrical outlet provide a good (or at
>least reasonable) path to earth ground? I.e. would I be able to hook
>up a three prong grounded plug with the two hot prongs removed in
>order to connect my rig to earth ground via the electrical outlet?

The third wire "ground" connection on outlets is intended to be an electrical *safety* ground for DC or 50/60 cycle AC voltages. It is not generally an effective RF ground. Even a short straight wire has some inductance, and a long serpentine electrical cable looping from outlet to outlet certainly has plenty. It will act as a high impedance to RF and almost certainly will couple your signals into the electrical wiring causing TVI, RFI, and other forms of I to other pieces of electronic equipment plugged into the same branch circuit.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
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534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

Date: 28 Jan 93 20:24:40 GMT
From: news-mail-gateway@ucsd.edu
Subject: Wilson T-1402SM
To: info-hams@ucsd.edu

I am looking to buy crystals for a Wilson T-1402SM, and I want to know
if anyone can tell me the best place to purchase these?
Thank You

```
#####  
#      N8RTA (Technician Class)          R. Michael (Mike) Wardin      #  
#      34ID2QW@CMUVM.BITNET              Kewadin Village Apt. #808      #  
#      (517) 774-6932                    301 W. Broomfield Rd.        #  
#                                          Mt. Pleasant, MI 48858-4542    #  
#####  
#      43 year old Blind Student at Central Michigan University      #  
#      and Devoted Faithful Leader Dog, Johnny-Be-Good (Yellow Labrador)#  
#      Majoring in Therapeutic Recreation, Minorring in Office        #  
#      Information Stystems, Canoest and avid Spelunker.              #  
#####
```

Date: Thu, 28 Jan 1993 01:02:34 GMT
From: elroy.jpl.nasa.gov!swrinde!gatech!concert!rock!taco!
csemail.cropsci.ncsu.edu!samodena@ames.arpa
To: info-hams@ucsd.edu

References <C1F8Fp.4wM@inews.Intel.COM>, <44051@zygot.ati.com>,
<C1IXDq.9oM@mentor.cc.purdue.edu>op
Subject : Re: Ham Radio Causes Cancer

In article <C1IXDq.9oM@mentor.cc.purdue.edu> fleekdc@expert.cc.purdue.edu (Dan
Fleek) writes:

>In article <44051@zygot.ati.com> john@zygot.ati.com (John Higdon) writes:

>>

>>I swear if I hear about one more thing that "causes cancer"...

>>

>

>I can understand a higher rate of cancer among hams. When I took my
>license exam, the examiners and other club hams at the test were
>chain smoking. After about 20 minutes I went outside to get some air
>so my eyes would quit watering. Members of our local club don't smoke
>fortunately.

>

>Dan

Well, Dan, I invite you to take your next exam with us....because smoking is definitely not allowed.

If anyone has trouble with the "environment" in which their exam is taking place, speak up (nicely). If you feel that you have not received a proper response or responsiveness from the Volunteer Examiners, ask them for the name of their sponsoring VEC and for a mailing address or telephone number. Then follow it up so that it won't happen the next time.

And may I add, if you failed to make your difficulties known at exam time, then I'd recommend a little introspection. :^)

— — —

[illegible]

References <1993Jan27.005128.27486@samba.oit.unc.edu>,
<weaverb.728109078@rintintin.Colorado.EDU>,
<1993Jan28.010914.24916@samba.oit.unc.edu>
Subject : Re: Larsen "kulduckie" w/ HT - is it worth it?

In <1993Jan28.010914.24916@samba.oit.unc.edu>, Kirk.Smith@launchpad.unc.edu writes:

>[info on Diamond RH-77B sucking deleted]

>

>Your mileage may vary.. I've got an Icom dual band antenna (same
>one supplied w/W2A) and while it works well, it doesn't even come
>close to the Diamond.

I use a Diamond RH-960 (next model up from RH-77) on my Kenwood HT and it improves reception as well as transmission. It's also used on my scanner with a great improvement there too.

--

\\ \ Bob Kupiec - Amateur Radio Packet: N3MML @ wb3ftp.#epa.pa.usa.noam / \ \
/ \ \ Internet: kupiec@hp800.lasalle.edu (or) (UUCP site is temp down) / \ \ /
\\ \ \ LaSalle University, 20th St. & Olney Ave., Philadelphia, PA / \ \ \ \
/ \ \ \ \ Top 10 uses for your Intel CPU: Number 10: Test hammers / \ \ \ \ /

End of Info-Hams Digest V93 #126
